3. (Twice Amended) A video coding apparatus for coding a video picture by the use of motion compensatory prediction of each of video pictures with respect to sequentially input video signals, the video coding apparatus comprising:

inter-frame variance calculation means for calculating a variance between timewise adjacent [input video signals] frames with respect to the input video signals;

intra-frame coding mode decision means for deciding an intra-frame coding mode based on the variance without using any motion compensatory prediction; and

one-way coding (P) frame interval decision means for deciding a P frame interval for carrying out motion compensatory prediction coding based on the features between time wise adjacent frames with respect to the input video pictures,

a GOP boundary position being decided based on the decision by the intra-frame coding mode decision means, and the P frame interval inside a GOP being decided based on the decision by the P frame interval decision means.

Add the following new claims 27-29:

27. (Added) A video coding apparatus for coding a video picture by the use of motion compensatory prediction of each of video pictures with respect to sequentially input video signals, the video coding apparatus comprising:

inter-frame variance calculations means for calculating a variance between timewise adjacent frames with respect to the input video signals; and

intra-frame coding mode decision means for deciding an intra-frame coding mode based on the variance without using any motion compensatory prediction, a GOP boundary position being decided based on the decision by the intra-frame coding mode decision means.

28. (Added) A video coding apparatus according to claim 27, wherein the intra-frame coding mode decision means selects an intra-frame coding mode when the inter-frame variance exceeds a predetermined threshold value.

29. (Added) A video coding apparatus according to claim 27, wherein the inter-frame variance is calculated by using at least one of an absolute difference between the input video pictures and a pixel dispersion value of each of small blocks, into which the input video picture is divided.